

READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE INSTALLING FIXTURE

This fixture is intended for installation in accordance with the National Electrical Code and local regulations. To assure full compliance with local codes and regulations, check with your local electrical inspector before installation. To prevent electrical shock, turn off electricity at fuse box before proceeding.

Retain these instructions for maintenance reference.

INSTRUCTION SHEET NO.**IS:FAEM3****C0506****Page 1 of 4****Installation of Compact Fluorescent Emergency Ballast Accessory FAEM3E to Standard Calculite Four-Pin Electronic Compact Fluorescent Lamp Frame-In Kit****IMPORTANT SAFEGUARDS****READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD BE FOLLOWED INCLUDING THE FOLLOWING:

- 1. TURN OFF AC POWER BEFORE PROCEEDING.**
- 2. DO NOT INSTALL INSULATION WITHIN 3 INCHES OF FIXTURE SIDES OR WIRING COMPARTMENT, NOR ABOVE FIXTURE IN SUCH A MANNER AS TO ENTRAP HEAT.**
- 3. BE SURE ALL ELECTRICAL CONNECTIONS ARE COMPLETE AND THE JUNCTION BOX IS CLOSED BEFORE INVERTER CONNECTORS (LOCATED IN THE SWITCH/INDICATOR LIGHT BOX) ARE CONNECTED.**
- 4. DO NOT USE OUTDOORS.**
- 5. DO NOT LET POWER SUPPLY CORDS TOUCH HOT SURFACES.**
- 6. DO NOT MOUNT NEAR GAS OR ELECTRICAL HEATERS.**
- 7. USE CAUTION WHEN SERVICING BATTERIES. CONTAINS NICKEL-CADMIMUM RECHARGEABLE BATTERY. MUST BE RECYCLED OR DISPOSED OF PROPERLY. DO NOT SHORT CIRCUIT; MAY CAUSE BURNS.**
- 8. EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AND AT A HEIGHT WHERE IT WILL NOT READILY BE SUBJECT TO TAMPERING BY UNAUTHORIZED PERSONNEL.**
- 9. THE USE OF ACCESSORY EQUIPMENT NOT RECOMMENDED BY THE MANUFACTURER MAY CAUSE AN UNSAFE CONDITION.**
- 10. DO NOT USE THIS EQUIPMENT FOR OTHER THAN INTENDED USE.**
- 11. THIS UNIT HAS MORE THAN ONE POWER SUPPLY CONNECTION POINT. TO REDUCE THE RISK OF ELECTRICAL SHOCK, DISCONNECT BOTH NORMAL AND EMERGENCY POWER SUPPLIES BEFORE SERVICING.**
- 12. BEFORE SERVICING TO PREVENT ELECTRICAL SHOCK, DISCONNECT THE INVERTER CONNECTORS OF THE EMERGENCY BATTERY PACK (LOCATED IN THE SWITCH/INDICATOR LIGHT BOX). MAKE CERTAIN THAT THE SWITCHED (IF THE FIXTURE IS SWITCHED) AND THE UNSWITCHED LINE TO THE EMERGENCY BATTERY PACK ARE TURNED OFF AT THE FUSE BOX. SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL ONLY.**
- 13. BEFORE ANY INSTALLATION, MAKE SURE TO CHECK THE COMPATIBILITY MATRIX BELOW BEFORE INSTALLATION. INCORRECT MATCHING MAY CAUSE ELECTRICAL SHOCK AND DAMAGE TO BALLASTS AND LAMPS. FOR USE WITH NON-DIMMING (U SERIES) AND DIMMING (J-SERIES) FRAME-IN KITS.**

Emergency Ballast	Lamp	Wattage	Compatible Ballast
FA-EM3E	Quad Tube 4-Pin	13W	Electroninc Non-Dimming Advance Mark 7 and Mark 10 (Dimming) Lutron compact SE, Hi-Lume, TU-Wire (Dimming)
		18W	
		26W	
	Triple Tube 4-Pin	18W	
		26W	
		32W	
		42W	

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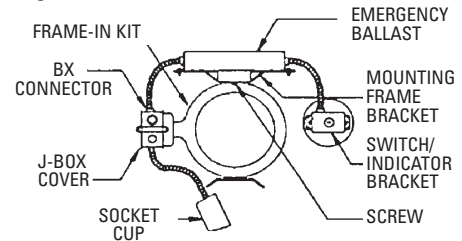
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NEW INSTALLATION**A. INSTALLING EMERGENCY BALLAST TO STANDARD FRAME-IN KIT (Fig. 1 and 8).**

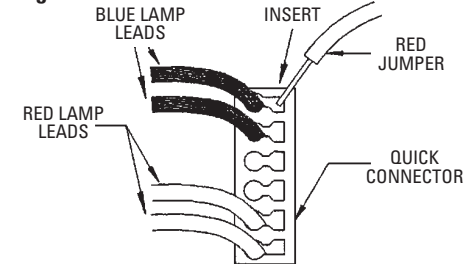
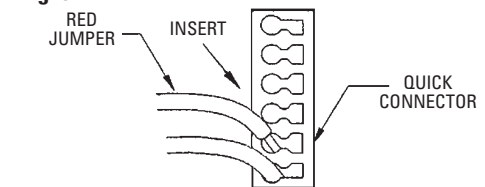
1. Before placing FRAME-IN KIT in the ceiling, install EMERGENCY BALLAST to the center of MOUNTING FRAME BRACKET as shown.
2. Tighten SCREW to secure two units together.
3. Remove JUNCTION BOX COVER and appropriate J-Box K.O., then attach EMERGENCY BALLAST BX CONNECTOR.

Fig. 1**WIRING - Read and understand all instructions before proceeding.**

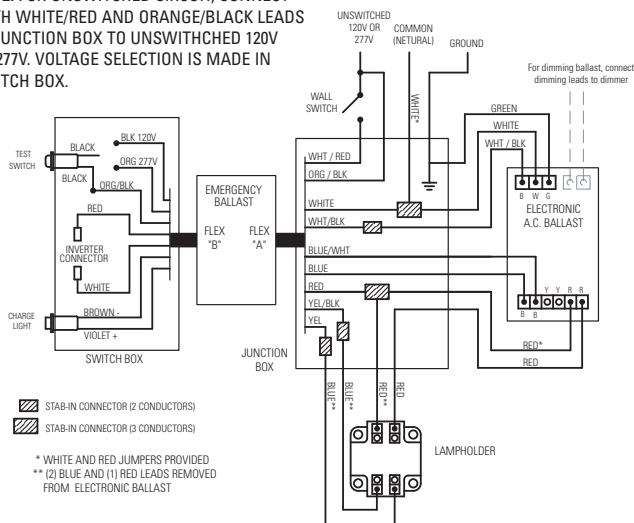
- Make sure AC power is off at the fuse box.
- Regular ballast and emergency ballast must be fed from the same branch circuit.
- Be sure all electrical connections are made and junction box is closed before connecting inverter connectors in switch/indicator light box.
- In switched fixtures, emergency ballast must be connected ahead of any local switching.
- Emergency ballast is shipped from the factory ready for 120V or 277V supply connection. Line Voltage selection is made at switch box. For 120V, remove wire nut from 120V lead (black) and connect to black lead of test switch, then cap the 277V lead (orange).

B. INSTRUCTIONS FOR WIRING EMERGENCY BALLAST FOR (1) OR (2) 4-PIN LAMPS ELECTRONIC A.C. BALLAST FRAME-IN KIT

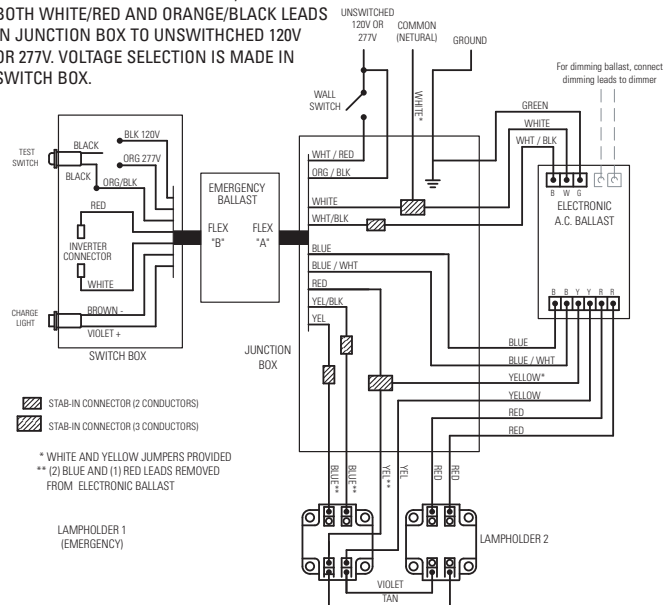
1. Before converting to emergency lighting, please identify no. of lamps and wattage of frame-in kit, then select appropriate Wiring Diagram A, B or C for rewiring. There is a requirement to remove lamp leads from A.C. ballast, and reconnect to emergency ballast.
2. Disconnect either BLUE LAMP LEAD from BALLAST by inserting conductor of RED JUMPER (provided) into open terminal of QUICK CONNECTOR of BALLAST as shown in Fig. 2. Gently pull BLUE LAMP LEAD out. Then remove RED JUMPER for later use.
3. Repeat step 2 (above) to remove other BLUE LAMP LEAD, and one appropriate RED OR YELLOW LAMP LEAD from BALLAST (Fig. 2) and wiring diagrams.
4. Insert appropriate RED OR YELLOW JUMPER into the terminal where the RED OR YELLOW LAMP LEAD was previously removed from QUICK CONNECTOR (Fig. 3).
5. Follow WIRING DIAGRAM A, or B, or C to complete the wiring at FLEX "A".

Fig. 2**Fig. 3****WIRING DIAGRAM A (1-LAMP FIXTURE)
(1 LAMP EMERGENCY)**

NOTE: FOR UNSWITCHED CIRCUIT, CONNECT BOTH WHITE/RED AND ORANGE/BLACK LEADS IN JUNCTION BOX TO UNSWITCHED 120V OR 277V. VOLTAGE SELECTION IS MADE IN SWITCH BOX.

**WIRING DIAGRAM B (2-LAMP FIXTURE) UP TO 2-42W
(1 LAMP EMERGENCY)**

NOTE: FOR UNSWITCHED CIRCUIT, CONNECT BOTH WHITE/RED AND ORANGE/BLACK LEADS IN JUNCTION BOX TO UNSWITCHED 120V OR 277V. VOLTAGE SELECTION IS MADE IN SWITCH BOX.



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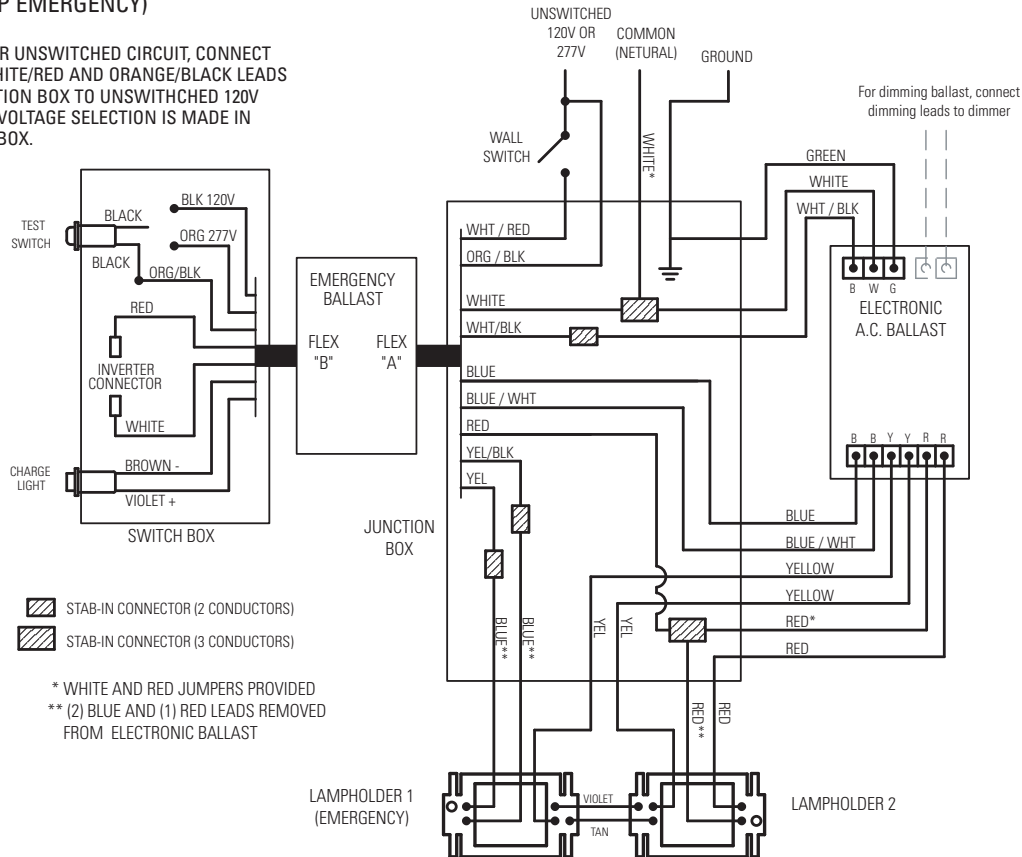
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WIRING DIAGRAM C (2-LAMP FIXTURE) UP TO 2-26W (2 LAMP EMERGENCY)

NOTE: FOR UNSWITCHED CIRCUIT, CONNECT BOTH WHITE/RED AND ORANGE/BLACK LEADS IN JUNCTION BOX TO UNSWITCHED 120V OR 277V. VOLTAGE SELECTION IS MADE IN SWITCH BOX.



C. INSTALL MOUNTING FRAME TO CEILING SUPPORT MEMBERS (See separate frame-in kit instruction sheet).

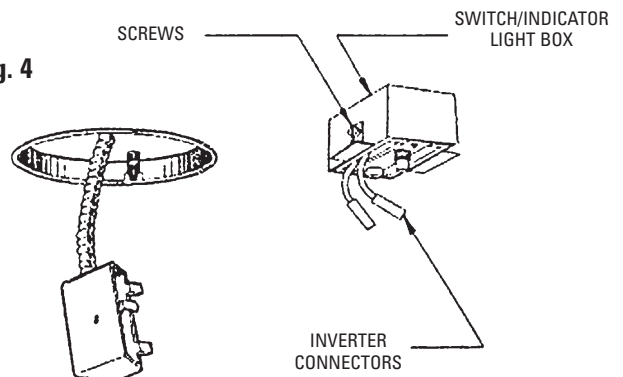
D. WIRE-IN

Connect supply leads to emergency ballast, electronic ballast and fixture ground wire as shown in WIRING DIAGRAM A, B, or C. Cap unused lead. Close the junction box cover after wiring is completed.

E. CLOSE-IN

1. Cut appropriate hole size in ceiling for frame.
2. Cut hole in ceiling for SWITCH/INDICATOR LIGHT BOX in a convenient location to the side of frame (Fig. 4). The recommended hole size is 2-5/8" x 3-3/4".
3. Close-in ceiling.

Fig. 4



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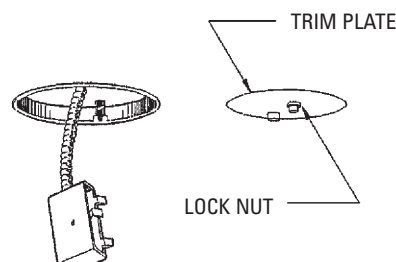
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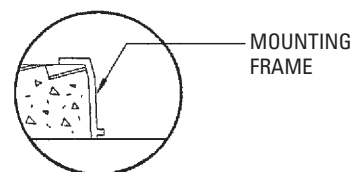
E. CLOSE-IN (CONT.)

4. Pull down SWITCH/INDICATOR LIGHT BOX and clamp onto ceiling by tightening SCREWS on side of BOX (Fig. 4).
5. Connect INVERTER CONNECTORS in SWITCH/INDICATOR LIGHT BOX (Fig. 4).
6. Fasten TRIM PLATE to SWITCH/INDICATOR LIGHT BOX with LOCK NUT (Fig. 5).

Fig. 5**F. ADJUST MOUNTING FRAME**

1. Set MOUNTING FRAME so the bottom edge is flush with finished ceiling (Fig. 6).

Note: Final vertical adjustment can be made with MOUNTING BRACKET SCREWS (Fig. 7) on inside of MOUNTING FRAME.

Fig. 6**G. OPERATION**

When AC power is applied, the charging indicator light is illuminated indicating that the battery is being charged. When the power fails, the emergency lighting ballast automatically switches to emergency operation, keeping one lamp illuminated at reduced output for 90 minutes.

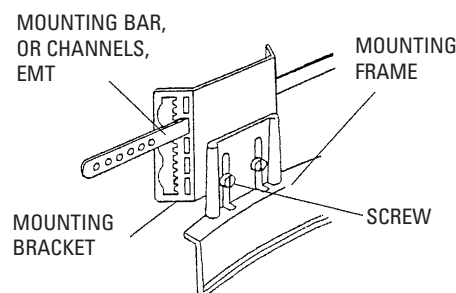
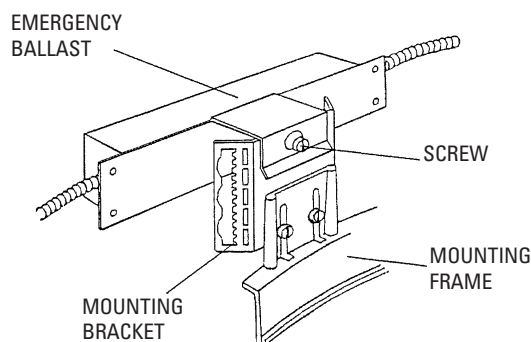
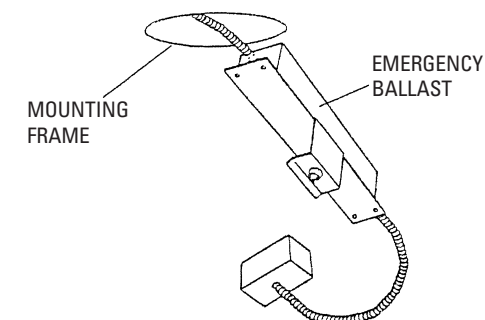
H. MAINTENANCE

Although no routine maintenance is required to keep emergency lighting ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

1. Visually inspect the charging indicator light monthly. It should be illuminated.
2. Test the emergency operation of fixture once every 3 months. One lamp should operate at reduced output.
3. Conduct a 90 minute discharge test once a year. One lamp should operate at reduced output for 90 minutes.

I. EMERGENCY BALLAST REPLACEMENT

1. Make sure AC power is off at fuse box.
2. Remove REFLECTOR (see reflector trim instruction sheet).
3. Remove TRIM PLATE by removing LOCKNUT (see Fig. 5); disconnect INVERTER CONNECTORS, loosen SCREW on side of SWITCH BOX and slip SWITCH BOX onto the ceiling.
4. Loosen SCREW away from EMERGENCY BALLAST ASSEMBLY (Fig. 8).
5. Pull EMERGENCY BALLAST off MOUNTING BRACKET and down through the frame opening (Fig. 9).
6. Unscrew and disassemble defective EMERGENCY BALLAST from SWITCH BOX and JUNCTION BOX.
7. Replace with new EMERGENCY BALLAST. Follow wiring diagram and instruction procedure as stated in this Instruction Sheet.

Fig. 7**Fig. 8****Fig. 9****EXISTING INSTALLATION**

NOTE: Emergency ballast kit may be installed after the frame-in kits and ceilings are finished. If ceiling is accessible from above, it may be easier to install the emergency ballast from above.

- **EMERGENCY BALLAST INSTALLATION FROM ABOVE:**
Follow installation instructions in Step A, B, D and E.
- **EMERGENCY BALLAST INSTALLATION FROM BELOW:**
 1. Make sure AC power is off at fuse box.
 2. Remove REFLECTOR (see reflector trim instruction sheet).
 3. Install EMERGENCY BALLAST to the center of MOUNTING FRAME BRACKET as shown in Fig. 1 and 9.
 4. Go to step A, B, D and E.